

ENCOUNTERING HAZARDOUS MATERIALS

1744

(November 1991)

Employees may encounter hazardous materials in the performance of their duties. This section and [Section 1735](#) Emergency Response to Hazardous Incidents describes precautions to take to reduce the threat of exposure to hazardous materials that may be encountered on the job. (See [Sections 1712-1714](#) for reporting procedures for exposures to hazardous materials.)

ASBESTOS DUST

1744.1

(November 1991)

Asbestos dust exposure may result from relining brakes and clutches because most linings contain asbestos fibers. CAL FIRE employees are not likely to encounter asbestos dust in this manner more than a few times per year. Still, every precaution should be taken to protect the employee (see [Section 1750](#), Project Work and Activities). Employees will perform all brake and clutch work in a manner least likely to create airborne dust (e.g., using water or another wetting agent to eliminate airborne dust).

The presence of asbestos in buildings may create a potential health hazard to occupants if special precautions are not taken during renovations, maintenance repairs, or other activities. Technical Services will provide coordination and technical assistance for the mandatory asbestos management program. Administrative units should request assistance from the region engineer or staff assigned to this program (see Technical Services Procedures Handbook, Section 3240).

DUSTS, FUMES, MISTS, VAPORS, AND GASES

1744.2

(November 1991)

Whenever harmful dusts, fumes, mists, vapors, or gases exist or are produced in quantities harmful to employees during the course of operations, the exposure shall be controlled by removing the employees from the area of exposure, by limiting the daily exposure of employees to the hazard, or by application of engineering controls.

When it is clearly impractical to remove harmful dusts, fumes, mists, vapors, or gases at their source, or where employees need emergency protection against occasional or relatively brief exposure, employees shall use approved respiratory equipment (see [Section 1720](#), Protective Clothing and Equipment).

SMOKE INHALATION

1744.3

(No. 13 September 1998)

Smoke inhalation can result in serious injury or death. Employees should avoid breathing smoke from all types of fires as much as possible. With the extensive use of synthetic materials in structures and vehicles, smoke from these fires is likely to contain extremely hazardous fumes, gases, and vapors. When fighting structural or vehicle fires that are deficient of life supporting oxygen, contaminated by smoke and toxic gases, and/or have heat levels above normal body temperature, firefighters must wear a pressure-demand self-contained breathing apparatus (PDSCBA). In addition, they must keep the equipment on during mop-up stages. Firefighters should also wear breathing protection when working in a disposal area fire, or in any other type of fire that produces hazardous smoke.

As a preventive measure, fire prevention officers should inspect businesses using large quantities of chemicals such as insecticide formulations, chemical applicators (including insecticides), electroplating plants, chemical storage facilities, etc., to determine what toxic exposures are likely to occur during a fire. The fire prevention officers can then inform local medical facilities of possible exposures so that the facilities can initiate proper medical treatment to fire victims.

HAZARDOUS MATERIAL/PHYSICAL AGENT STUDY FILE 1744.4

(No. 13 September 1998)

Supervisors should send each study of a hazardous material or physical agent, including radiation, heat, vibration, noise, audiogram, chemical, dust, fume, mist, gas, or vapor, to the unit and region safety coordinators, through the chain of command, to be forwarded to the Department Safety Coordinator for central filing for the required retention period. This procedure applies to studies made by or at the request of the department as well as by outside agencies such as the Department of Health Services, CAL-OSHA Compliance or Consultation Service. The Safety Coordinators will be kept informed concerning studies regardless of whether a hazardous condition was found.

[\(see next section\)](#)

[\(see HB Table of Contents\)](#)

[\(see Forms or Forms Samples\)](#)